SEQUENCE LISTING

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<120> SUPERFICIAL ZONE PROTEIN AND METHODS OF
   MAKING AND USING SAME

<130> 07083.0008U5

<150> 60/258,920
<151> 2000-12-29

<160> 11

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 1
Asp Glu Ala Gly Ser Gly
 1   5

<210> 2
<211> 188
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 2
Met Ala Trp Lys Thr Leu Pro Ile Tyr Leu Leu Leu Leu Leu Ser Val
 1   5   10   15
Phe Val Ile Gln Gln Val Ser Ser Gln Asp Leu Ser Ser Cys Ala Gly
            20   25   30
Arg Cys Gly Glu Gly Tyr Ser Arg Asp Ala Thr Cys Asn Cys Asp Tyr
        35   40   45

```
Asn Cys Gln His Tyr Met Glu Cys Cys Pro Asp Phe Lys Arg Val Cys
    50              55              60
Thr Ala Glu Leu Ser Cys Lys Gly Arg Cys Phe Glu Ser Phe Glu Arg
65              70              75              80
Gly Arg Glu Cys Asp Cys Asp Ala Gln Cys Lys Lys Tyr Asp Lys Cys
                85              90              95
Cys Pro Asp Tyr Glu Ser Phe Cys Ala Glu Val Lys Asp Asn Lys Lys
            100             105             110
Asn Arg Thr Lys Lys Lys Pro Thr Pro Lys Pro Pro Val Val Asp Glu
        115             120             125
Ala Gly Ser Gly Leu Asp Asn Gly Asp Phe Lys Val Thr Thr Pro Asp
    130             135             140
Thr Ser Thr Thr Gln His Asn Lys Val Ser Thr Ser Pro Lys Ile Thr
145             150             155             160
Thr Ala Lys Pro Ile Asn Pro Arg Pro Gln Ser Ser Pro Asn Ser Asp
            165             170             175
Thr Ser Lys Glu Thr Ser Leu Thr Val Asn Lys Glu
        180             185
```

```
<210> 3
<211> 538
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 3
Pro Thr Thr Ile His Lys Ser Pro Asp Glu Ser Thr Pro Glu Leu Ser
1               5               10              15
Ala Glu Pro Thr Pro Lys Ala Leu Glu Asn Ser Pro Lys Glu Pro Gly
            20              25              30
Val Pro Thr Thr Lys Thr Pro Ala Ala Thr Lys Pro Glu Met Thr Thr
            35              40              45
Thr Ala Lys Asp Lys Thr Thr Glu Arg Asp Leu Arg Thr Thr Pro Glu
    50              55              60
Thr Thr Thr Ala Ala Pro Lys Met Thr Lys Glu Thr Ala Thr Thr Thr
65              70              75              80
Glu Lys Thr Thr Glu Ser Lys Ile Thr Ala Thr Thr Thr Gln Val Thr
            85              90              95
Ser Thr Thr Thr Gln Asp Thr Thr Pro Phe Lys Ile Thr Thr Leu Lys
            100             105             110
Thr Thr Leu Ala Pro Lys Val Thr Thr Thr Lys Lys Thr Ile Thr Thr
        115             120             125
Thr Glu Ile Met Asn Lys Pro Glu Glu Thr Ala Lys Pro Lys Asp Arg
    130             135             140
Ala Thr Asn Ser Lys Ala Thr Thr Pro Lys Pro Gln Lys Pro Thr Lys
145             150             155             160
Ala Pro Lys Lys Pro Thr Ser Thr Lys Lys Pro Lys Thr Met Pro Arg
            165             170             175
Val Arg Lys Pro Lys Thr Thr Pro Thr Pro Arg Lys Met Thr Ser Thr
        180             185             190
```

```
Met Pro Glu Leu Asn Pro Thr Ser Arg Ile Ala Glu Ala Met Leu Gln
        195             200             205
Thr Thr Thr Arg Pro Asn Gln Thr Pro Asn Ser Lys Leu Val Glu Val
        210             215             220
Asn Pro Lys Ser Glu Asp Ala Gly Gly Ala Glu Gly Glu Thr Pro His
225             230             235             240
Met Leu Leu Arg Pro His Val Phe Met Pro Glu Val Thr Pro Asp Met
                245             250             255
Asp Tyr Leu Pro Arg Val Pro Asn Gln Gly Ile Ile Ile Asn Pro Met
                260             265             270
Leu Ser Asp Glu Thr Asn Ile Cys Asn Gly Lys Pro Val Asp Gly Leu
        275             280             285
Thr Thr Leu Arg Asn Gly Thr Leu Val Ala Phe Arg Gly His Tyr Phe
        290             295             300
Trp Met Leu Ser Pro Phe Ser Pro Pro Ser Pro Ala Arg Arg Ile Thr
305             310             315             320
Glu Val Trp Gly Ile Pro Ser Pro Ile Asp Thr Val Phe Thr Arg Cys
                325             330             335
Asn Cys Glu Gly Lys Thr Phe Phe Phe Lys Asp Ser Gln Tyr Trp Arg
        340             345             350
Phe Thr Asn Asp Ile Lys Asp Ala Gly Tyr Pro Lys Pro Ile Phe Lys
        355             360             365
Gly Phe Gly Gly Leu Thr Gly Gln Ile Val Ala Ala Leu Ser Thr Ala
        370             375             380
Lys Tyr Lys Asn Trp Pro Glu Ser Val Tyr Phe Phe Lys Arg Gly Gly
385             390             395             400
Ser Ile Gln Gln Tyr Ile Tyr Lys Gln Glu Pro Val Gln Lys Cys Pro
                405             410             415
Gly Arg Arg Pro Ala Leu Asn Tyr Pro Val Tyr Gly Glu Met Thr Gln
        420             425             430
Val Arg Arg Arg Arg Phe Glu Arg Ala Ile Gly Pro Ser Gln Thr His
        435             440             445
Thr Ile Arg Ile Gln Tyr Ser Pro Ala Arg Leu Ala Tyr Gln Asp Lys
        450             455             460
Gly Val Leu His Asn Glu Val Lys Val Ser Ile Leu Trp Arg Gly Leu
465             470             475             480
Pro Asn Val Val Thr Ser Ala Ile Ser Leu Pro Asn Ile Arg Lys Pro
                485             490             495
Asp Gly Tyr Asp Tyr Tyr Ala Phe Ser Lys Asp Gln Tyr Tyr Asn Ile
        500             505             510
Asp Val Pro Ser Arg Thr Ala Arg Ala Ile Thr Thr Arg Ser Gly Gln
        515             520             525
Thr Leu Ser Lys Val Trp Tyr Asn Cys Pro
        530             535
```

```
<210> 4
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct
```

<221> VARIANT
<222> 2
<223> Xaa is any amino acid except Pro

<221> VARIANT
<222> 3
<223> Xaa is either Thr or Ser

<400> 4
Asn Xaa Xaa
 1

<210> 5
<211> 488
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 5
atgcatgaaa cattccatta ctgtgttctg tgttgtttct gatcacaatt tatccaaatt   60
atcagcgtga ggagagtggg agggatttag gatccactga acgtgttaaa cgtcacatac   120
tgggtgtgcc tgtttaagga gctgactcgg gcttccgtaa ggcgcgcttg atcctcggag   180
ggggggggtgg acgcgcgcca agtagaatat acagtgtgtc cgttagaggt ttctgtgcag   240
aagtaaaaga taacaagaag aacagaacta aaaagaaacc tacccccaaa ccaccagttg   300
tagatgaagc tggaagtgga ttggacaatg gtgacttcaa ggtcacaact cctgacacgt   360
ctaccaccca acacaataaa gtcagcacat ctcccaagat cacaacagca aaaccaataa   420
atcccagacc ccagtcttca cctaattctg atacatctaa agagacgtct ttgacagtga   480
ataaagag   488

<210> 6
<211> 1620
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 6
cctaccacta tccacaaaag ccctgatgaa tcaactcctg agctttctgc agaacccaca   60
ccaaaagctc ttgaaaacag tcccaaggaa cctggtgtac ctacaactaa gactcctgca   120
gcgactaaac ctgaaatgac tacaacagct aaagacaaga caacagaaag agacttacgt   180
actcacctg aaactacaac tgctgcacct aagatgacaa aagagacagc aactacaaca   240
gaaaaaacta ccgaatccaa aataacagct acaaccacac aagtaacatc taccacaact   300
caagatacca caccattcaa aattactact cttaaaacaa ctactcttgc acccaaagta   360
actacaacaa aaaagacaat tactaccact gagattatga caaacctga agaaacagct   420
aaaccaaaag acagagctac taattctaaa gcgacaactc ctaaacctca aaagccaacc   480

```
aaagcaccca aaaaacccac ttctaccaaa aagccaaaaa caatgcctag agtgagaaaa      540
ccaaagacga caccaactcc ccgcaagatg acatcaacaa tgccagaatt gaaccctacc      600
tcaagaatag cagaagccat gctccaaacc accaccagac ctaaccaaac tccaaactcc      660
aaactagttg aagtaaatcc aaagagtgaa gatgcaggtg gtgctgaagg agaaacacct      720
catatgcttc tcaggcccca tgtgttcatg cctgaagtta ctcccgacat ggattactta      780
ccgagagtac ccaatcaagg cattatcatc aatcccatgc tttccgatga gaccaatata      840
tgcaatggta agccagtaga tggactgact actttgcgca atgggacatt agttgcattc      900
cgaggtcatt atttctggat gctaagtcca ttcagtccac catctccagc tcgcagaatt      960
actgaagttt ggggtattcc ttcccccatt gatactgttt ttactaggtg caactgtgaa     1020
ggaaaaactt tcttctttaa ggattctcag tactggcgtt ttaccaatga tataaaagat     1080
gcagggtacc ccaaaccaat tttcaaagga tttggaggac taactggaca aatagtggca     1140
gcgctttcaa cagctaaata taagaactgg cctgaatctg tgtatttttt caagagaggt     1200
ggcagcattc agcagtatat ttataaacag gaacctgtac agaagtgccc tggaagaagg     1260
cctgctctaa attatccagt gtatggagaa atgacacagg ttaggagacg tcgctttgaa     1320
cgtgctatag gaccttctca aacacacacc atcagaattc aatattcacc tgccagactg     1380
gcttatcaag acaaaggtgt ccttcataat gaagttaaag tgagtatact gtggagagga     1440
cttccaaatg tggttacctc agctatatca ctgcccaaca tcagaaaacc tgacggctat     1500
gattactatg ccttttctaa agatcaatac tataacattg atgtgcctag tagaacagca     1560
agagcaatta ctactcgttc tgggcagacc ttatccaaag tctggtacaa ctgtccttag     1620
```

```
<210> 7
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 7
atggcatgga aaacacttcc catt                                              24

<210> 8
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 8
ctaaggacag ttgtaccaga cttt                                              24

<210> 9
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct
```

```
<400> 9
Phe Ala Cys Glu
 1


<210> 10
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<400> 10
Val Lys Asp Asn Lys Lys Asn Arg
 1               5


<210> 11
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence; note =
      synthetic construct

<221> VARIANT
<222> 8
<223> Xaa is either Thr or Pro

<400> 11
Lys Glu Pro Ala Pro Thr Thr Xaa
1 5
2
5
```
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